

# Positive Parenting Styles in Educating Alpha-Generation Children in the Industrial Revolution 4.0 Era

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## Abstract

An intangible piece of gold can be beautiful if it is carved by an expert carver, and young children will become good individuals who grow and develop well shall their parents are knowledgeable about good parenting patterns. The alpha generation comprises individuals born in 2013 and above. This generation faces the Industrial Revolution 4.0 era, in which such a revolution is a phenomenon collaborating cyber and automatization technologies, meaning that all things are applied using technologies that reduce human involvement in the process. Parents should understand parenting style in educating alpha-generation children facing the Industrial Revolution 4.0 era. This parenting style is definitely different than parenting styles of previous generations. Therefore, the study aimed to understand a good parenting style for alpha-generation children in encountering the Industrial Revolution 4.0 era. The study method was systematic review, where researchers documented and processed various sources, such as articles, books, and documents concerning positive parenting styles in educating the alpha generation and facing the Industrial Revolution 4.0 era.

**Kata Kunci:** *parenting; early childhood; alpha generation; industrial revolution 4.0*

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## Introduction

Parenting is a method used by parents in educating children with a parental control principle, indicating that parents can control, guiding, and accompanying the children in conducting their development tasks to adulthood (Ubaidillah et al., 2022). There are many parenting styles implemented in Indonesia, including authoritarian, permissive, and authoritative (Anisah, 2011). The authoritarian parenting style is dominated by parents without the independence to ask to the children, in which the children are demanded to obey and follow all commands and regulations made by parents. The permissive parenting style tends to give high degree of freedom for children, leaving minimal limits and rules that allow children to make their decisions and explore. The authoritative parenting style tends to prioritize discussions between parents and children. Hence, warmth and affection are intertwined and this parenting style prioritizes discussions rather than interruptions. These three parenting styles have their weaknesses and strengths, depending on each parent to discover which style most suitable to be implemented to their children.

Children in early childhood are individuals in the rapid development phase. Thus, this phase is commonly called the golden phase (Suryana, 2021 : 25). In this phase, parents should

really educate, assist, control, and guide the children to grow and develop following the parents' expectations. If illustrated, a child is like a lump of gold that has not been carved by an expert so the gold does not yet look beautiful. However, after being carved with knowledge, the gold can look beautiful. Vice versa, if a piece of gold is carved by a non-expert without the knowledge of carving, it could leave the gold looking poor. As with early childhood period, if a child receives good parenting style, they will grow and develop well. If the child receives a poor parenting style, their growth and development will be poor.

Technology grows over time. Such development will inevitably affect all human life aspects, in the social, mindset, cultural, economic, and parental style. Each individual should adjust and balance technological advance to keep balance in life. Moreover, technology also influences each individual generation, from the X generation to the alpha generation, with their uniqueness. The alpha generation is where technologies are developed; and therefore, everything is easily acquired. However, this convenience can cause children to become more self-centered, anti-social, less self-confident, making it difficult to socialize directly, less sensitive to other people's feelings, and withdrawing from social groups (Christine, 2021). Technological advance also brings alpha-generation children and all levels of society of the millennial generation to enter the digital literacy realm, where every person uses digital technology in daily life, such as the internet and gadgets (Swandhina & Maulana, 2022).

With technological advance, alpha-generation children also grow and develop in the Industrial Revolution 4.0 era, where all production aspects are comprehensively transformed through the combination between digital and internet and the conventional industry (Tarantang et al., 2019). The industry 4.0 has massive benefit potentials in improving production flexibility speed, increasing service to customers and income. On the other hand, there are several challenges, such as the opinion of Drath and Horch, stating that the challenge is resistance against demographic changes, social aspects, political condition instability, limited resources, natural disaster risks, and environmentally friendly technology application (Tarantang et al., 2019).

Apart from that, the era of industrial revolution 4.0 is also a digital era, in which children are no longer unfamiliar with gadgets that can influence their character. This is proven from the results of research conducted by Rahmalah et al. (2019) which proves that gadgets can influence children's character formation in a direction that is not good for children who use gadgets intensively. Otherwise, for children who are limited in their use or even rarely use gadgets, good character is easy to develop in children. From several challenges of industry 4.0 and seeing the results of this research, it becomes a challenge for every parent who has an alpha generation child regarding the appropriate parenting style for an alpha generation child in the era of the industrial revolution 4.0. Therefore, researchers want to conduct research on positive parenting patterns in educating alpha generation children in the era of industrial revolution 4.0. These several industry 4.0 challenges pose a challenge for parents with alpha-generation children to select the best parenting style in the Industrial Revolution 4.0 era. Therefore, the researchers would like to study about positive parenting styles in educating alpha-generation children in the Industrial Revolution 4.0 era.

## Methodology

In this study, the authors used the Systematic Review method. According to Wright, in a systematic review, there are several steps that need to be considered (Wright et al., 2007);

a) **Formulating Research Problems.** This first step aimed to facilitate the search for relevant literature reviews. The questions formulated usually refer to the term PICO (Population, Intervention, Comparison, and Outcome). The study problem is "What is a good parenting style in educating alpha-generation children in the Industrial Revolution 4.0 era?",

b) **Literature Search.** The literature search must be sufficient to develop the current study. In selecting literature, selection was performed based on inclusion and exclusion criteria. Literature satisfying the inclusion criteria would be included in the systematic review,

while unsuitable articles would be excluded (Wright et al., 2007). In this study, researchers used Google Scholar software. The keywords during the search were parenting style, Alpha generation, and Industrial Revolution 4.0.

c) **Quality Assessment.** This stage aimed to ensure that the literature is of sufficient quality and reliable for drawing conclusions or recommendations. There are three criteria in this quality assessment, i.e., the article has a clear methodology, the article presents the parenting patterns of the alpha generation in the Industrial Revolution 4.0 era, and study results can be considered.

d) **Data Analysis.** This data analysis is presented in a table format containing population, intervention, and study results from each literature.

e) **Result Interpretation.** Data analysis yielded study results. The researchers interpreted the results to allow readers to discover the strengths and weaknesses of the study results. It will become a recommendation for further research.

## Result and Discussion

Over time, many studies have been carried out on parenting patterns to educate alpha-generation children and the challenges and methods to face the Industrial Revolution 4.0 era. In 2018-2023, 12 articles met the criteria set in the literature quality stage. Researchers acquired categories and sub-categories in each included literature. These categories were obtained through the process of reading and understanding the contents of each article.

**Table 1. Systematic Literature Review Findings**

No	Parenting Styles of Alpha-Generation Children in Facing the Industrial Revolution 4.0 Era	
	Author	Strategy
1.	Widaningsih et al. (2019)	Instill a value system, critical thinking skills, innovation, increasing competence and teacher appreciation, personalizing learning and using technology.
2.	Purnama (2018)	(1) Follow developments in technology, information, and communication, enabling parents to have provisions and guide their children to interact with the internet intelligently and healthily; (2) teach children to socialize so that their social-emotional development can develop well; (3) participate in training and developing children's physical-motor aspects; (4) help equip children with religious and moral values; (5) educate children not to depend on technology; and (6) play a maximum role as a discussion friend and a place to ask questions
3.	Saman & Hidayati (2023)	Authoritative parenting style and democratic parenting style
4.	Christine (2021)	Democratic parenting style (love, discipline, teaching, and example)
5.	Maulana & Nuhafizah (2019)	Teachers must be competent to conduct comprehensive assessments, have 21st century competencies (character, literacy skills/competence), can present modules according to students' passions, and can carry out authentic, innovative learning
6.	Ubaidillah et al. (2022)	Limit children's time playing with gadgets
7.	Nurjanah & Mukarromah (2021)	Time management in using digital media, limit internet access, monitor online activities, and plan learning
8.	Rohimin (2019)	Rewards, punishments followed by love, mutual help, togetherness, and kinship
9.	Susilaningsih et al. (2023)	Instill values from daily activities, involve children in social activities, apply an authoritative parenting style, improve life skills at home, and increase verbal communication
10.	Ayunina & Zakiyah (2022)	Instill religious values from an early age, create a collaborative family, provide limits and rules in using technology, involve children in problem-solving, and instill character following the child's developmental age.
11.	Ismail et al. (2020)	Teachers in Malaysia prepare knowledge and skills in science and technology to face the challenges of the Industrial Revolution 4.0
12.	Shahroom & Hussin (2018)	The interruption of innovation that resulted in Education 4.0 focusing on developing education and skills has made future learning more customized, hyper, smart, portable, global, and virtual.

After obtaining categories and sub-categories, the author conducted a synthesis process to find research answers. The author presents the findings and discussion in table 1.

Based on Table 1 comprising the systematic review made by the authors, 12 articles are relevant to the research question. The table states several strategies to use in educating alpha-generation children to face the Industrial Revolution 4.0 era based on the results of previous research.

### Challenges of Industrial Revolution 4.0

Technological changes always have two impacts on humans, i.e., positive and negative impacts. The Industrial Revolution 4.0 era has advantages and disadvantages for humans. Among the advantages or benefits of the Industrial Revolution 4.0 are (Sawitri, 2019): 1) Make human work easier, especially in industrial activities, 2) Better data security due to the connection to cloud computing, 3) Reduced human error because a controlled computer can produce consistent work, 4) Sophisticated system which can be controlled in real time.

The disadvantages of the Industrial Revolution 4.0 are (Sawitri, 2019): 1) Reduced need for human labor in industrial processes due to automatic work by machines, 2) Increased issues regarding data security by integrating new systems and increasing access to systems, 3) Requires strict control from humans during the production process because AI intelligence cannot surpass human intelligence.

The passage above explains the general advantages and disadvantages of the Industrial Revolution 4.0. The challenge Indonesian education system will face in the industrial revolution 4.0 era is instilling educational values to be developed (Syamsuar & Reflianto, 2019). Guilford (1985) stated that the application of the values education developed is (Syamsuar & Reflianto, 2019): 1) Children are educated and trained by working while learning, therefore children's thinking intelligence is developed as widely as possible; 2) Cultivate children's personalities with Indonesian personalities to become dynamic, confident, brave, responsible, and independent individuals; 3) Lessons are provided during class hours and every other opportunity beyond school hours; 4) Examples of good deeds are implemented to develop good character.

Research conducted by Ismail et al. (2020) demonstrated that teachers in Malaysia prepare knowledge and skills in science and technology to face the challenges of the Industrial Revolution 4.0 due to changes in the teaching and learning process from traditional-based to technology-based learning (Ismail et al., 2020).

### Preparing the Alpha-generation children

In facing the Industrial Revolution 4.0, one must prepare the early childhood education system by considering the characteristics of the alpha generation, improving education quality, and the concept of education 4.0. Some aspects to be considered are as follows (Widaningsih et al., 2019):

1) **Instilling Value System.** Instilling a value system in early childhood can be performed through fairy tales since one of the characteristics of early childhood is fantasy. Fairy tales are suitable for instilling values in early childhood. The values include character values, such as honesty, responsibility, mutual cooperation, social ethics, ethics in using technology, and others. It aims to educate alpha-generation children who live in rapid technological developments. Fairy tales can take the forms of videos, sounds, and images accessible through technology. A study by Susilaningsih et al. (2023) showed that educating alpha-generation children could use a strategy of instilling values in daily activities, involving children in social activities, applying an authoritative parenting style, improving life skills at home, and increasing verbal communication (Susilaningsih et al., 2023). Another study by Ayunina & Zakiyah (2022) believed that strategies for educating alpha-generation children include instilling religious values from an early age, creating collaborative families, providing



limits and rules in using technology, involving children in problem-solving, and instilling character following the child's developmental age (Ayunina & Zakiyah, 2022).

2) **Critical Thinking and Innovating Skills.** Today, technology is developing rapidly. However, some human abilities fail to be defeated by technology. Among these abilities are critical and creative thinking. Critical and creative thinking allows humans to come up with scientific or new discoveries, while robots or existing technology cannot develop or renew if they are not operated by humans. The next ability is social interaction. Robots have no emotional intelligence like humans. Therefore, this ability is crucial to instill from an early age, allowing children to have good emotional intelligence to face the Industrial Revolution 4.0. The next ability is the ability to innovate. Among these innovation abilities are initiative (the ability to make decisions or take actions to operationalize ideas, mobilize and manage people who will implement ideas), creativity, critical thinking, team work, and networking (ability to engage internal/external stakeholders).

3) **Teacher Competence Improvement and Appreciation.** Teacher competence and appreciation must be improved upon observing that technological advances grow over time. Teachers shall keep their competence to keep up with these technological developments. Teachers in Finland, which is famous for its best education system, are highly valued, and all teachers have at least a Master's degree.

4) **Personalized Learning.** Personalized learning can be provided by parents to equip children to face general learning at school. At school, children have no personal learning except for those taking private learning.

5) **Technology Utilization.** Parents or teachers should use technology wisely with children given its positive and negative impacts. For example, parents continue to supervise children's use of technology, limit children's use of technology, and others.

### **Parenting Style for Alpha-generation children**

Being a parent in the digital transformation era is a challenge where all forms of information are easily accessible by all groups of people, from children to adults. Therefore, parents must master and understand this technology to ensure their children receive age-appropriate information. Based on the study results of Saman & Hidayati (2023), the appropriate parenting styles for alpha-generation children are authoritative and democratic parenting (Saman & Hidayati, 2023). Authoritative parenting teaches children rules and discipline in a way that supports children's development and provides reasonable explanations regarding rules and consequences. Authoritative parenting aims to create a role model for alpha-generation children, i.e., controlled caring that does not spoil the child (Saman & Hidayati, 2023). Democratic parenting style builds cooperation and provides direction and guidance with flexible parental control. These two parenting styles are suitable to be applied to the alpha generation, especially in the Maluku area, which is famous for its tough character, making authoritative parenting appropriate to be applied. Furthermore, democratic parenting is also suitable because the family background has mixed ethnicities, enabling the character traits to be balanced (Saman & Hidayati, 2023).

A study by Christine (2021) showed that most parents in the Banyumanik area use democratic parenting in educating alpha-generation children. It is proven by parents' attitude, which never force children to achieve their expectations, do not directly fulfill trivial children's requests, have time for activities when gathered, and chat and listen to children's opinions (Christine, 2021). In this parenting style, parents provide essential elements. First, love is shown with words, physical touch, giving time to listen to the child, and giving gifts to the child to instill a strong identity. Second, discipline allows the child's personality to be directed and orderly. The third element is teaching with different forms of motivation.

Based on a study by Ubaidillah et al. (2022), in educating alpha-generation children in the digital era at SPS As-Sa'diyyah Gondong Pace Nganjuk, training was performed through parenting activities. Parents have improved knowledge in raising alpha-generation children.

The strategy to educate the alpha generation in this area is to limit the use of gadgets by children (Ubaidillah et al., 2022). Align with the Industrial Revolution 4.0 era, the strategy of limited gadget use is suitable for alpha-generation children. Moreover, a study by Nurjanah & Mukaromah (2021) demonstrated the strategies used by parents in educating alpha generation children by managing time in using digital media, limiting internet access, monitoring online activities, and planning learning (Nurjanah & Mukarromah, 2021).

### Parenting Style

Parenting style consists of two words, i.e., “style” and “parenting.” A style is a strategy, while parenting means guarding (protecting and guiding) a child. Hence, it can be defined that a parenting style is a form or strategy in guarding, protecting, and guiding a child in their growth and development process (Dhuriyani et al., 2022). According to Edwards, a parenting style is the interaction between parents and children in educating, guiding, disciplining, and protecting a child to reach adulthood following social norms (Padjrin, 2016). From these two definitions, it can be understood that a parenting style is a strategy of parents in educating their children for well growth and development. Regarding parenting, Berns mentioned that parenting is an interaction process continuously occurring that affects the child and parents (Djuwita, 2020). Terminologically, parenting can be defined as “a process to educate children.” In Bahasa, the word “parenting” has many meanings, including (Surbakti, 2012): 1) A method or way to meet child physiological and psychological needs; 2) A method or way to nurture a child based on the standards and criteria determined by parents; 3) A method or way to educate and teach a child to have knowledge and skills; 4) A method or way to instill and enforce values in children; 5) A method or way to teach and implement religious values in children; 6) A method or way to teach proper interaction and relation patterns to children; 7) Related to family and kinship relationships as parents and children; 8) Related to the authority and sovereignty of parents as the center of power in the family.

From this description, there are many parenting meanings in Indonesian, but the aim remains the same, i.e., for optimal growth and development of children. According to Adelman, there are several tips for raising children in the Industrial Revolution 4.0 era: (1) supervising children when accessing the internet via smartphone; (2) selecting appropriate content for children; (3) mastering information from digital media; (4) evaluating, distributing, and producing positive and productive content (*Mobile Application Parenting, Assertive and Management stress (Pisang Gen Alfa)*, 2020). Some of these tips can help parents in educating children in the Industrial Revolution 4.0 era.

### Alpha Generation

There are many opinions defining the alpha generation, particularly for those in the alpha generation age range. The first opinions states that children in the alpha generation are those born between 2011-2025 (Lestari & Widjayatri, 2022). The second opinion mentions that the alpha generation was born between 2010 to 2025 (Christine, 2021). The third opinion believes that the alpha generation was born between 2010 to 2024 (Yasir & Susilawati, 2021). From the three opinions, it concludes that the alpha generation are children born since the technology development. Mc Crindle asserts that the alpha generation has several characteristics: lack of creative development, predominantly individualistic attitude, lack of time for socializing, and finding it difficult to get away from gadgets (Lestari & Widjayatri, 2022).

Child development expert from the University of Indonesia, Anastasia Satryo, said that one of the characteristics of the alpha generation is digital literacy from an early age. This generation has been exposed to technology continuously since childhood and has resulted in getting used to instant things and unfamiliar with processes. Furthermore, the alpha generation also has critical thinking due to abundant, accessible information (Assingkily et al., 2019). The alpha generation is also known as the generation mostly familiar with technology

and is claimed as the smartest than previous generations. However, this generation has drawbacks: bossy, dominant, likes to control, dislikes sharing, hesitant to follow rules, making technology as a part of life, blind to the world without social networks, and lacks the ability to communicate directly (Kuswanto et al., 2022). It concludes that the alpha generation has strengths and weaknesses, where parents must understand them to develop the strengths and minimize the weaknesses.

Technological advance is rapid. Indeed, if the alpha generation is assisted by parents or adults into positive things, the nation will thrive. Also, parents play a vital role in supervising and guiding children to follow social norms. Current impacts of technological advance are marked by the modern era, including in Indonesia, followed by worrying moral decadence symptoms. Noble morals such as honesty, truth, justice, mutual help, tolerance, and mutual love have begun to be eroded by fraud, fraud, hostility, oppression, putting each other down, sucking up, taking other people's rights, and other disgraceful actions (Mauidah et al., 2022). It becomes a challenge for teachers and parents to preserve such noble morals in children despite the rapid technology development.

The appropriate education for alpha-generation children is digital technology education, collaboration of digital technologies and exciting activities (Ruslan et al., 2023). One of the information and communication technology implementation in education is multimedia and the internet utilization during the learning process (Akbar & Noviani, 2019). Parents and teachers must be well educated in utilizing multimedia and internet facilities, because most parents do not understand such a thing. Hence, most parents are defeated by their children, causing uncontrolled internet use by children.

### **Industrial Revolution 4.0**

The first Industrial Revolution occurred in the 18th century when steam-powered machines were discovered, encouraging humans to switch from relying on animal power to mechanical production machine power. The second Industrial Revolution took place around 1870 when industries switched to electric power to create mass production. The third occurred in the 1960s when electronic devices brought production automation, and now world industry and manufacturing are preparing to face the Industrial Revolution 4.0 (Syamsuar & Reflianto, 2019). Industry technology 4.0 was first known in Germany in 2011, marked by a strong integration between the digital world and industrial production. This revolution is in the digital era where all machines are connected via the internet or cyber system.

In facing the Industrial Revolution 4.0 era, education that forms a creative, innovative, and competitive generation is required by optimizing technology utilization as an educational tool expected to produce output that can keep up with or change the times for the better (Lase, 2020). Education 4.0 is a response to the needs of the Industrial Revolution 4.0 where humans and technology are aligned to create new opportunities creatively and innovatively (Lase, 2020). The Indonesian government is currently implementing strategic steps based on the road map for making Indonesia 4.0. One of the visions for making Indonesia 4.0 is to make Indonesia one of the top 10 countries with the strongest economy in the world by 2030. Increasing human resources is one of the ten priorities in implementing the Making Indonesia 4.0 program (Eko, 2019). In facing the Industrial Revolution 4.0, three new literacy skills are beneficial: digital, technological, and human literacy. Digital literacy is the ability to read, analyze, and use information from data in the digital world. Technological literacy is the ability to understand mechanical and technological systems in workplace. Human literacy is the ability to interact well, not rigidly, and with character (Lase, 2020). These three skills can be predicted to be valuable in the future or in the industry 4.0 era (Eko, 2019). The Industrial Revolution 4.0 is also called the disruption era, interpreted as innovation or threats to large companies since companies in this era compete fiercely with invisible opponents. Thus, quite a few companies are bankrupt (Maulana & Nuhafizah, 2019).

From the explanation above, many challenges will be encountered in this Industrial Revolution 4.0 era in educational, economic, social, and other aspects. Smart parents must face these challenges to produce generations that will advance Indonesia. Everyone must work together in this matter because together, a big challenge will be small.

## Conclusion

Technological progress is increasingly developing day by day, we as humans certainly cannot reject this progress because indirectly we are required to continue living with the times. The industrial revolution 4.0 is known as the digital era where all machines are connected via the internet system or cyber system. In this era, many jobs are operated by machine power, therefore there are many challenges in the era of industrial revolution 4.0 that will be faced by the alpha generation. The alpha generation, known as the generation familiar with technology and the smartest among the other generations, must be truly prepared to face the industrial revolution 4.0. To prepare for this, it starts with the parenting style of parents in educating alpha generation children. Based on the results of the research described above, it can be concluded that the right parenting style or strategy for educating alpha generation children in facing the era of the industrial revolution 4.0 is authoritative, democratic parenting, instilling a character value system in children, getting used to thinking critically, innovating, increase teacher appreciation, time limits and supervision in children playing with gadgets. Apart from that, religious values can also be instilled from an early age so that children have a good foundation for the future.

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